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REMARKS

Claims 1-33 are pending in the present application. Claim 20 has been amended. No new matter has been introduced by this amendment. Claim 32 has been cancelled leaving Claims 1- 31 and 33for consideration. Reconsideration and withdrawal of the outstanding rejection is respectfully requested in view of the following remarks.

Amended Claims:

Claim 20 has been amended. Antecedent basis for this claim may be found in original Claim 32. No new matter has been introduced by this amendment. Withdrawal of the rejection is respectfully requested.

Claims Rejected Under 35 U.S.C. §103(a) and under 35 U.S.C. §102(a, b or e)

Claims 1 – 33 stand rejected under 35 U.S.C. §102(a, b or e) and 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Pat. No. 6,219,329 to Tanaka et al., or EP 0438225 to Tanaka et al., or U.S. Pat. No. 6,183,830 to Okamoto et al., or U.S. Pat. No. 4,89[illegible],800 to Sugaya et al. (Paper 7, page 2).

The Examiner contends that "[e]ach of the references discloses a data storage media prepared from the same components as claimed by applicants except for the particular amounts and parameters, i.e., transmissivity as claimed" (Paper 7, page 2).

The present application is directed to and claims a colored data storage media comprising a substrate comprising colorant and plastic, wherein the substrate has a transmissivity of about 85% or less at a readback laser wavelength, when traversing a 1.2 mm thick colored substrate (Claims 1 – 19). The present application is also directed to and claims a colored data storage media, comprising a substrate comprising a fluorescent colorant and plastic, wherein the substrate has a fluorescent color emission wavelength which is not equal to the readback laser wavelength and has a transmissivity of about 70% to about 90% at the laser readback wavelength (Claim 20 – 33).

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988).

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For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A 1970).

In U.S. Pat. No. 6,219,329 or EP 0438225 (the European patent is the equivalent of the U.S. patent) to Tanaka et al., the inventors teach an optical disk having a fluorescent coloring material dispersed therein. When the optical disk is subjected to an external light, the fluorescent material emits a radiation of a fluorescent coloring material of a particular color, which can be seen at the opposite, second main surface and the outer circumferential surface of the optical disk (see Abstract).

In order to provide a disk with good data regeneration capabilities, Tanaka et al. teach that the material used to manufacture the disk must meet many severe requirements. One of these requirements is high transparency wherein the light is transmitted through with low loss (Col. 1, line 37 – 40). While Tanaka et al. are silent as to a specific numerical value for transmissivity; all the teachings in their patent are directed to maintaining high transparency and transmissivity. For example, with respect to the mixing of color into a plastic material, Tanaka et al. teach that it is necessary to mix a coloring material into a transparent plastic material (Col. 1, line 65 to Col. 2, line 14). Similarly Tanaka et al. teach that it is important to mix the fluorescent colorant into the substrate resin thoroughly, so that it is mixed with the resin on a molecular structural level to become a compatible mixture. This prevents the reduction in transmission of the laser beam substrate (Col. 3, lines 46 - 67). Similarly with respect to Figure 1, Tanaka et al. teach that if the laser beam L collides with a coloring particle it can be transmitted without a reduction in the intensity of the laser beam L, to enable sensitive regeneration of the data. (Col. 6, line 2 – 10). Tanaka et al. do not teach or suggest a substrate wherein there is a limitation on the transmissivity, i.e., where the transmissivity requirements for good reproduction are less severe such as that which can be achieved with a lower transmissivity. Further there is no motivation in the teachings of Tanaka et al. to manufacture a disk wherein the transmissivity requirements are reduced while maintaining good data reproduction.

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In order to address the failure of Tanaka et al. to teach the transmissivity of the present application, the Examiner claims that the transmissivity is inherent in the material of Tanaka et al. In relying on the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." (citing *In re King, W. L. Gore & Associates, Inc. v. Garlock, Inc., In re Oelrich,* and *In re Wilding, Hansgirg v. Kemmer and in Ex parte Levy*, 17 U.S.P.Q.2d 1461 (U.S.P.T.O. Bd. Pat. App. & Int.) Second, contrary to the Examiner's contention, the transmissivity is not believed inherent due to Tanaka et al.'s teachings. As stated above Tanaka et al. teach against any reduction in transmissivity even with the addition of the fluorescent colorant. In contrast the present application teaches and claims a colored data storage media comprising a substrate comprising colorant and plastic, wherein the substrate has a transmissivity of about 85% or less at a readback laser wavelength, when traversing a 1.2 mm thick colored substrate (Claims 1 – 19). The present application is also directed to and claims a colored data storage media, comprising a substrate comprising a fluorescent colorant and plastic, wherein the substrate has a fluorescent color emission wavelength which is not equal to the readback laser wavelength and has a transmissivity of about 70% to about 90% at the laser readback wavelength (Claim 20 – 33).

Consequently the Applicant contends that the transmissivity is not inherent in the Tanaka et al., and that Tanaka et al. teach away from such transmissivity. Applicant respectfully requests reconsideration and withdrawal of this rejection or at most that the Examiner "provide a basis in fact and/or explain the reasoning behind how an alleged determination of inherency would flow from the teachings of" Tanaka et al.

Since Tanaka et al. fail to teach the transmissivity range of the present application nor provide any motivation for doing so, applicant requests a withdrawal of the rejection under 35 U.S.C. §103(a) and under 35 U.S.C. §102(a, b or e).

Okamoto et al. teach a digital video disk substrate having a viscosity average molecular weight of 10,000 to 17,000 wherein the video disk substrate is little cracked at the time of molding and exhibits small birefringence (see abstract). Okamoto et al. do not even teach the addition of color to the substrate nor do they teach any numerical

requirements for the transmissivity of the substrate. Okamoto et al. do however mention the need for high transparency in a substrate for digital video disks several times in their patent (Col. 1, line 18, Col. 7, lines 65 – 66) and teach away from lowering transparency (reducing transmissivity) when molding the substrate (Col. 7, lines 59 – 65). Thus Okamoto et al. do not teach all the elements of the claimed invention and further appear to teach away from the reduced transmissivity requirements of the present application. Further Okamoto et al. do not correct the deficiency of Tanaka et al. by teaching the transmissivity requirements claimed in the present application. Additionally the teachings of Okamoto et al. do not render inherent the teachings of the present application. Applicant requests a withdrawal of the rejection under 35 U.S.C. §103(a) and under 35 U.S.C. §102(a, b or e).

Sugaya teaches an optical recording disc provided with a substrate permeable to a red laser beam for reading data recorded and having a single pass transmissivity of 85% or more (see abstract). Sugaya does not teach the addition of fluorescent colorants to the substrate but teaches the use of dyestuffs such as anthraquinone wherein the transmissivity of the substrate containing the dyestuff is greater than 85% (Col. 2, lines 1 – 10 and lines 57 – 68). The present application claims a colored substrate having a transmissivity of about 85% or less and alternatively from about 70% to about 90% when fluorescent colorants are used. Thus Sugaya appears to teach away from the claims of the present application in the case of colorants such as anthraquinone and is silent to the use of fluorescent colorants. Sugaya therefore does not correct the deficiencies of Tanaka et al. and/or Okamoto et al. Further if the teachings of Tanaka et al. and/or Okamoto et al. were combined with Sugaya, the combined teachings would point away from the transmissivity requirements as claimed in the present application. Thus there is no motivation to be gained from the combined teachings of the prior art cited by the Examiner that would direct one of skill in the art to the claimed invention. These references each fail to teach the elements of the present application nor do they render the claims of the present application inherent or obvious.

Applicant requests a withdrawal of the rejection under 35 U.S.C. §103(a) and under 35 U.S.C. §102(b).

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It is believed that the foregoing remarks and amendments fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this amendment or otherwise, please charge them to Deposit Account No. 07-0862 maintained by Assignee.

Respectfully submitted,

Curtis Cradic, et al.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

A marked up version of claim 20 is as follows:

20. A colored data storage media, comprising:

a substrate comprising a fluorescent colorant and plastic, wherein the substrate has a fluorescent color emission wavelength which is not equal to the readback laser wavelength [and has a transmissivity of about 70% to about 90% at the laser readback wavelength].